

MIOGRYLLUS AND ITS SPECIES IN THE UNITED STATES.

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Miogryllus, an American genus, has not hitherto been recognized as occurring in the United States, excepting that one of its species, originally described by me as a *Gryllodes*, was placed here by Saussure, who had not seen it. A study of the material in my collection, though scanty, reveals the presence of no less than five species, all found along our southern border, which may be separated by the table given below.

I have seen none of the species found further south beyond our borders, but as developed in the United States, *Miogryllus*—first described as a section or subgenus of *Gryllus*—is distinguished from *Gryllus* by the much smaller size of its representatives, approximating *Nemobius*, in the (usual) absence or ex-

tremely inconspicuous nature of the auditory foramen on the inner side of the fore tibiae (found distinctly in only one species), in the unbranched or only one-branched (rarely two-branched) mediastinal vein of the tegmina, in the presence of only two "oblique veins" on the tympanum of the male tegmina, in the longitudinal course of the veins on the dorsal field of the female tegmina, in the brevity of the hind tibiae, which are only about two thirds as long as the hind femora and are armed on either side with four or five spines only, and in the striped or banded, usually longitudinally striped, summit of the head. The male tegmina are apically truncate or subtruncate, and the antennae are apparently longer and slenderer than in *Gryllus*.

Table of the United States species of Miogryllus.

- α^1 . Auditory foramen on inner side of fore tibiae absent or very obscure.
- β^1 . Disk of pronotum mottled irregularly with dark and light in equal masses, or wholly dark; hind tibiae not or scarcely more than two thirds as long as hind femora; mediastinal vein of tegmina not more than one-branched.
- ϵ^1 . Head relatively large; pronotum noticeably broader in front than behind, the colors on disk and lateral lobes prevailing light *capitatus*.
- ϵ^2 . Head relatively small; pronotum not or but feebly broader in front than behind, the colors on disk and lateral lobes prevailing dark.
- α^1 . Head conspicuously striped longitudinally; lateral lobes of pronotum narrowly margined beneath with light color; tegmina shorter than head and pronotum combined, the mediastinal vein unbranched *lineatus*.
- α^2 . Head generally black, sometimes slightly striped longitudinally; lateral

lobes of pronotum broadly margined beneath with pale color; tegmina longer than head and pronotum together, the mediastinal vein one-branched

saussurei.

β^2 . Disk of pronotum mainly light, with transverse dark stripes; hind tibiae distinctly, though but slightly, more than two thirds as long as hind femora; mediastinal vein of tegmina one- or two-branched *transversalis*.

α^2 . Auditory foramen on inner side of fore tibiae distinct though small . . . *siarius*.

Miogryllus capitatus sp. nov.

A stout species, conspicuously marked. Head large, tumid, glistening, dark fuscous above, conspicuously striped longitudinally with testaceous, there being three stripes on either side, while all the lower part of the head is testaceous, including the mouth parts; eyes black; antennae luteo-testaceous. Pronotum half as broad again as long, increasing slightly but distinctly and regularly in size from behind forwards, both margins truncate, with a median impressed line, the disk and upper half of lateral lobes mottled with blotches of fuscous and ferrugineo-testaceous in about equal amounts, the lower half or more of the lateral lobes testaceous but narrowly edged with fuscous. Tegmina about as long as the head and pronotum together, apically subtruncate, testaceous, the mediastinal vein one-branched. Legs testaceous, the fore tibiae with the auditory foramen of inner side very feebly indicated, the hind tibiae slightly more than two thirds as long as hind femora, with five spines on either margin above.

Length of body, 12.5 mm.; pronotum, 3 mm.; breadth of head, 4.75 mm.; of pronotum in front, 4.5 mm.; length of tegmina, 5.75 mm.; hind femora, 9.5 mm.; hind tibiae, 6.5 mm.

1 ♂, 2 immature. Gulf coast of Texas (Aaron).

The large head is the noticeable feature in this species.

Miogryllus lineatus.

Grylloides lineatus Scudd., Ann. rep. chief eng., 1876, 499 (1876).

The hind femora are 6.5 mm. long and the hind tibiae 4.25 mm.

Between Virgin River and Ft. Mohave, Ariz., Aug. (W. Somes).

Miogryllus saussurei.

Gryllus saussurei Scudd., Proc. Bost. soc. nat. hist., xix, 35-36 (1877).

The measurements of the hind legs are: femora, ♂, 9.5 mm., ♀, 9 mm.; tibiae, ♂, ♀, 6 mm.

Georgia (Morrison); Rosewell, Geo. (King); Sandford, Fla. (G. B. Frazer); Key West, Fla. (Morrison).

Miogryllus transversalis sp. nov.

A relatively slender species, testaceous, transversely marked with fuscous. Head rather small, testaceous, marked with a large fuscous patch between the ocelli and for an equal space behind them, as well as down the front nearly to the clypeus on either side next the antennal scrobes; eyes and a patch below them fuscous; antennae three or four times as long as body, ferrugineo-testaceous, the basal joint luteous. Pronotum about half as broad again as long, subequal but broadest in the middle, both margins trun-

cate, the disk luteo-testaceous, broadly margined behind with fuscous, the lateral lobes shallow, fuscous, with an oblique elliptical luteous patch at the lower anterior angle. Tegmina considerably longer than head and pronotum together, apically truncate, testaceous more or less infumated, the veins luteous, the mediastinal vein one- or two-branched; wings apparently aborted. Legs pale luteous, slightly flecked with fuscous, the auditory tympanum on inner side of fore tibiae wanting, the hind tibiae somewhat more than two thirds as long as the hind femora, with five rather long and slender spines on either margin above.

Length of body, 13 mm.; pronotum, 2.5 mm.; breadth of head, 3.75 mm.; of pronotum at front margin, 3.5 mm.; length of tegmina, 5.6 mm.; of hind femora, 10 mm.; hind tibiae, 7 mm.

1 ♂, Biscayne Bay, Fla. (Mrs. A. T. Slosson).

This species is remarkable for the transverse effect of the markings of the front of the body and has relatively longer hind tibiae than the other species.

Miogryllus sicarius sp. nov.

A light-colored slender species. Head testaceous with a large vertical fuscous patch

extending from the hinder edge of the antennae backward, but not reaching the eyes, and containing two slender longitudinal testaceous stripes. Pronotum about half as broad again as long, equal in breadth throughout, the hind margin feebly sinuous, the whole testaceous considerably blotched with transverse patches of fuscous on the disk, the lateral carinae marked posteriorly with fuscous, the lower margin of the lateral lobes and the hind margin of the disk feebly edged with fuscous. Tegmina testaceous, fully as long as head and pronotum together, not apically truncate, the mediastinal vein unbranched; wings exceedingly long, extending backward when at rest about as far as the outstretched hind legs. Legs testaceous, the auditory foramen on inner side of the fore tibiae small but distinct, short oval; hind tibiae about two thirds as long as hind femora, with four spines on the inner, five on outer row; ovipositor twice as long as hind tibiae.

Length of body, 13 mm.; pronotum, 2.25 mm.; breadth of head, 3.5 mm.; pronotum, 3.5 mm.; length of tegmina, 6 mm.; hind femora, 7.75 mm.; hind tibiae, 5 mm.; ovipositor, 10 mm.

1 ♀, San Diego (Uhler).

This is the only species which has a distinct auditory foramen on the fore tibiae.

KERMES QUERCUS LINN.

BY GEO. B. KING, LAWRENCE, MASS.

Just recently Dr. L. Reh, of Hamburg, Germany, sent me some scale insects for names. In one vial, to my surprise and with much pleasure, I

found a scale insect which seems to have been involved in obscurity for over a century and is here technically described for the first time.